LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method, <u>implemented on an image-producing device including at least an image sensor and an evaluation unit,</u> for detecting a characteristic of at least one object, in which

a. optical radiation influenced by the object is fed to ~~an~~ <u>the</u> image sensor,

b. at least two different partial images consisting of pixels are read out in succession from the image sensor, and values assigned to the pixels are fed to ~~an~~ <u>the</u> evaluation unit,

c. the characteristic of the object is determined in each case from the values that are assigned to a partial image, and

d. the partial images are combined to form a total image that is output for further processing.

2. (Original) The method as claimed in claim 1, wherein

the determination of the characteristics from values of a partial image is performed simultaneously at least in part with the reading-out of a following partial image.

3. (Original) The method as claimed in claim 1, wherein

the partial images do not overlap one another.

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4. (Original) The method as claimed in claim 1, wherein

the partial images are assembled from at least two incoherent pixel areas.

5. (Original) The method as claimed in claim 1, wherein

the partial images are assembled in each case from a number of completely read-out

pixel rows of the image sensor.

6. (Original) The method as claimed in claim 1, wherein

the partial images are assembled in each case from a number of only partially read-out

pixel rows of the image sensor.

7. (Original) The method as claimed in claim 5, wherein

the pixel rows of a partial image are spaced apart from one another in each case by a

prescribed number of pixel rows that are not to be read out.

8. (Original) The method as claimed in claim 5, wherein

the read-out sequence of a second partial image read out following on from a first partial

image is offset from the first partial image by a pixel row.

9. (Original) The method as claimed in claim 1, wherein

the partial images are read out in such a time that at least 10 total images per second can

be output.

10. (Original) The method as claimed in claim 1, wherein

a partial image consists of only so many pixels that the reading-out of a partial image and the determination of the characteristic can be performed within 10 ms in each case.

11. (Original) The method as claimed in claim 1, wherein

at least one parameter of the object from the group of position, dimension, shape, change in shape, speed of movement, color, brightness, optical reflection behavior of the object is determined as the characteristic.

12. (Original) The method as claimed in claim 1, wherein

the characteristic is determined with the aid of a prescription of characteristics.

13. (Original) The method as claimed in claim 12, wherein

the prescription of characteristics is derived from at least one already determined characteristic.

14. (Original) The method as claimed in claim 1, wherein

the read-out sequence of a partial image is controlled with the aid of a characteristic of the object determined from a preceding partial image.

15. (Original) The method as claimed in claim 1, wherein

an appliance is controlled with the aid of at least one value obtained from the characteristic of the object.

16. (Original) The method as claimed in claim 15, wherein

an appliance from the group of a laser appliance for operating on an eye, an aligning apparatus for positioning the image sensor relative to the position of the object, an optical irradiation apparatus, an apparatus for controlling an electrical parameter, a robot is controlled.

17. (Original) The method as claimed in claim 1, wherein

an appliance parameter is regulated in conjunction with at least one value obtained from the characteristic of the object.

18. (Original) The method as claimed in claim 1, wherein

the variation in the characteristic of the object is displayed by a sequence of total images.

19. (New) A method, implemented on an image-producing device including at least an image sensor and an evaluation unit, for detecting a characteristic of at least one object in which

a. optical radiation influenced by the object is fed to an image sensor such that a first partial image is recorded at a first instant and at least a second partial image is recorded at a second successive instant by the image sensor,

b. the first partial image and the second partial image, each consisting of pixels as recorded by the image sensor, are read out in succession from the image sensor, and values assigned to the pixels are fed to an evaluation unit,

c. the characteristic of the object is determined in each case from the values that are assigned to the pixels of the first partial image and the second partial image, and

d. the first partial image and second partial image are combined either together or with additional partial images to form a total image that is output for further processing.

20. (New) A method, implemented on an image-producing device including at least an image sensor and an evaluation unit, for detecting a characteristic of at least one object in which

a. optical radiation influenced by the object is fed to an image sensor such that an integration of a first partial image, wherein charges reduced by an action of light are summed in the pixels of the image sensor that are assigned to the first partial image, begins at a first instant and an integration of a second partial image, wherein charges reduced by an action of light are summed in the pixels of the image sensor that are assigned to the second partial image, begins at a second instant,

b. the first partial image and the second partial image are read out in succession from the image sensor and values are assigned to the pixels and fed to an evaluation unit,

c. the characteristic of the object is determined in each case from the values that are assigned to the pixels of the first partial image and the second partial image, and

d. the first partial image and second partial image are combined either together or with additional partial images to form a total image that is output for further processing.